second shape memory form shown in dotted lines in part B. In this second form it forms a non-zero angle with the plane of the plate **10** such that the blade **23** is lifted. When the arm **13** is cooled, it returns to the first memorised form and the blade **23** is again in the plane of the plate **10**. In the form shown in **FIG. 2**, there is a single arm **13**. Naturally there could be several arms **13**, for example two arms obtained by a longitudinal recess of the arm **13** shown in **FIG. 2**, this recess going from the blade **23** to the continuum of the plate **10**. The same applies to the embodiment described and shown in **FIG. 2**, where the arm **13** changes form by flexion. The arm **13** can also change its form by torsion. In this case the blade **23** is mobile by rotation about the axis BB. Naturally the arm **13** can also change form by torsion and flexion, giving the blade a shift by two degrees of freedom. In this case and according to the place where the arm **13** is heated, three positions for the blade **23** could be obtained, a first position corresponding to a single flexion, a second position corresponding to a single torsion and finally, a third position corresponding at the same time to torsion, and flexion of the arm **13**.

[**0051**] The shape memory material will be for example nickel-titanium or a copper alloy shape memory material, for example, CuZnAl or CuAlNi or CuAlBe.

[**0052**] The form of the element **25** shown in **FIG. 2** is applicable also when the invention is made with a plate **10** consisting of two sub-layers or sub-plates **11**, **12**. In this case the heating of the part **21** causes deformation of the arm **13**, causing, as explained earlier, curving and/or torsion of the latter and lifting of the blade **23**, as shown in part B. In part B this second alternative has been shown by the fact that the element **25** shown in section is formed by two sub-plates **11**, **12** whereof the plane of delimitation is shown by a dotted line.

[**0053**] In the embodiment shown in **FIG. 3**, the shape memory material making up the plate **10** is a one-way material. The blade **23** is connected to the au continuum of the plate by first **13** and second **15** arms. One, as shown in **FIG. 3**, or more first arms **13** have a first cold form and a second hot form. One or more second arms **15** undergo elastic deformation when the first arms **13** pass from their cold form to their memorised form. Due to this elastic deformation a return force is created which contributes to returning the blade **23** to its first form when it is cooled.

[**0054**] According to a variant of this first embodiment an element **25** of the plate **10** has in a plan view the form above mentioned in relation to **FIG. 2**. In this variant the plate is formed from two sub-plates **16**, **17** assembled on one another for example by welding or bonding, so as to form a single plate, as shown in **FIG. 4**. A first sub-plate **16** is made of a shape memory material A. A second sub-plate **17** is made of an elastic material B. The material B can be for example spring steel or a copper-beryllium alloy or a harder material such as silicon used in microelectronics. In this configuration the arm **13** and the blade **23** having the form shown in **FIG. 2** in a plan view are, similar to the rest of the plate, formed from two sub-plates **16**, **17** superposed on one another. The arm **13** comprises two superposed parts **13***a* and **13***b* respectively. When a part for example **21** of the upper part **13***a* of the arm **13** of the first sub-plate made of material A is heated, it will cause deformation of this part by deformation of the material A, causing elastic deformation of the part **13***b* of the arm **13** made of material B. When, due to the natural or active cooling of the material A, the material A is less rigid, the return of the material B to its initial form by elastic effect causes the materials A and B to return to the first form.

[**0055**] Therefore, in this embodiment and in its variant, modification elements **25** of the surface **10***a* of the plate **10** comprising the shape memory material, incorporating elastic elements **15**, **13***b* mechanically connected on the one hand to the plate **10** and on the other hand to the modification element **25** to which they belong, these elastic elements exerting a return force on the modification element **25** of the surface of the plate **10** to take it from the second to the first form.

[**0056**] According to a third embodiment shown in **FIG. 5** part A, the plate **10** is formed by two sub-plates **16**, **19** assembled on one another for example by welding or bonding so as to form only a single plate **10**. In the preferred form of this embodiment, the two sub-plates **16**, **19** are adherent one to the upper face and the other to the lower face of an intermediate layer **18** made of a thermally insulating material. A first sub-plate **16** is made of a shape memory material A. A sub-plate **19** is made of a second shape memory material C having a memorised form different from the memorised form of the first. An exemplary embodiment of a modification element **25** is shown in a plan view in **FIG. 5**, part B. In this view, only a part **25***a* of the element **25** made in the upper sub-plate **16** is apparent. A blade **23***a* is obtained in the sub-plate **16** by means of two recesses **14**, a first **14** having a U shape surrounding the blade **23***a* on three of its sides, and a second **14***a* having a form of a circle located substantially to the side of the open part of the U. The recess **14***a* in the form of a circle has a diameter less than the distance separating the two parallel arms of the U such that two arms **13***a* join the blade **23***a* to the rest of the continuum of the plate.

[**0057**] **FIG. 5** part C shows a view from below of the element **25**. In this view, only a part **25***c* of the element **25** made in the sub-plate **19** is apparent. A blade **23***c* is obtained by a recess **14** right around the blade, with the exception of a central arm **13***c* joining the blade **23***c* to the rest of the continuum of the plate. In **FIG. 5** parts B and C two shaded parts a and c respectively are shown to which heating is applied for changing form.

[**0058**] The heating can be applied by any known means. It can also be applied by irradiation by a laser beam scanning the zone to be heated.

[**0059**] The assembly of the parts **25***a* and **25***c* is shown in a plan view in **FIG. 5** part D. In this figure the sub-part **25***a* of a modification element **25** of the surface **10***a* of the plate **10** formed in the sub-plate **16** has its recessed part **14***a* present above the full sub-part **13***c* forming in the present case the arm **13***c* of the sub-part **25***c* of the other sub-plate **19**. This arrangement is advantageous in the sense that a single scanning laser can be used to heat either the deformable part shown in **FIG. 5** part B of the upper sub-part **16** or alternatively the deformable part **13***c* of the lower plate **19**.

[**0060**] This operates as follows:

[**0061**] The part a of the sub-plate **16** made of material A for example is deformed by heating and regains its memorised form. This form is shown in a transversal section in